

*Sub B* 3  
polymeric material of the polymeric member while subjecting the polymeric material to plastic deformation.

*A*  
3. (Amended) The method of claim [1] 4 wherein the polymeric material from which the polymeric member is formed is a thermoplastic polymer selected from the group consisting of polyetheretherketone, polyetheramide, polyphenylene sulfide and polysulfone, and including causing the temperatures of both the polymeric and metallic members to increase to a temperature above the glass transition temperature of the polymeric material and applying pressure to cause the polymeric member to deform and bond to the metallic member.

*Sub C* 4  
4. (Amended) The method of claim 1 wherein the hot pressing of the polymeric member against the metallic member includes placing a heat shrinkable member about the polymeric member and the metallic member, and heating the heat shrinkable member to shrink said member against the polymeric and metallic members[, causing the temperatures of both the polymeric and metallic members to increase to a temperature above the glass transition temperature of the polymeric material and apply adequate pressure to cause the polymeric member to plastically deform and bond to the metallic member].

**Please add new claims 16-18.**

*Sub B6*  
16. A method of making an intravascular catheter with an elongated shaft, by securing a polymeric member to a metallic tubular member in a high strength fluid tight relationship, comprising:

*A2*  
a) mounting the polymeric member against the metallic tubular member so that the polymeric tubular member is in contact with a surface of the metallic tubular member; and

*Page 10 of 12*  
b) hot pressing the polymeric member against the metallic member at a temperature above the glass transition temperature and below the melting point of the polymeric material of the polymeric member, so that the polymeric tubular is bonded to the surface of the metallic tubular member by a hot pressed bond, wherein the polymeric tubular member has a deformed section defined by the hot pressed bond, and a nondeformed section longitudinally adjacent to the deformed section and in contact with the surface of the metallic tubular member.

17. An intravascular catheter with an elongated shaft comprising:

a) a metallic tubular member having proximal and distal ends and an inner lumen extending between the proximal and distal ends;

b) a polymeric tubular member having proximal and distal ends and an inner lumen extending between the proximal and distal ends, in contact with and bonded to a surface of the metallic tubular member by a hot pressed bond between one part of the